

IN THE CLAIMS

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1. (Currently Amended) A drive head assembly for use to fluid sealingly rotate a rod extending down a well, comprising:
a rotatable sleeve adapted to concentrically receive a portion of said rod therethrough;
a prime mover drivingly connected to said sleeve for rotation thereof so that rotation of said sleeve causes rotation of said rod; and
means for drivingly connecting said sleeve to the rod, ~~and~~
~~a prime mover drivingly connected to said sleeve for rotation thereof.~~
2. (Original) The drive head assembly of claim 1 further comprising a tubular standpipe concentrically mounted within said sleeve in annular spaced relation defining a first annular fluid passageway between said standpipe and said sleeve and a second annular fluid passageway between said standpipe and said rod, said second passageway being in fluid communication with wellhead pressure in said well during normal operations.
3. (Original) The drive head assembly of claim 2 further comprising seal means between said first and second passageways permitting the maintenance of a fluid pressure differential therebetween.
4. (Original) The drive head assembly of claim 3 including means for maintaining the fluid pressure in said first

passageway in excess of wellhead pressure in said second passageway.

5. (Original) The drive head assembly of claim 4 wherein said seal means are disposed in said first passageway.
6. (Original) The drive head assembly of claim 5 wherein said seal means are compressively loaded in said first passageway for enhanced sealing.
7. (Original) The drive head assembly of claim 4 wherein said means for maintaining the fluid pressure in said first passageway comprise a fluid pump and a fluid conduit for the delivery of pressurized fluid from said pump to said first passageway.
8. (Original) The drive head assembly of claim 7 wherein said pump is actuatable by said prime mover.
9. (Original) The drive head assembly of claim 8 wherein said means for drivingly connecting said sleeve to the rod comprise a cap member releasably and tightenably connectable to an upper end of said sleeve for rotation therewith, said cap member having a bore for the passage of the rod therethrough, and a rod clamp for transmitting rotational torque from said cap member to said rod.
10. (Original) The drive head assembly of claim 9 further comprising static seal means disposed in sealing

contact around said rod adjacent said upper end of said sleeve.

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11. (Original) The drive head assembly of claim 10 wherein said static seal means comprise one or more vertically stacked sealing members and a rigid seal carrier for supporting said seal members about the rod, said seal carrier sealingly occupying the annular space between said seal members and the inner surface of said upper end of said sleeve.
 12. (Original) The drive head assembly of claim 11 wherein said seal means and said static seal means operably function together as a stuffing box for said rod.
 13. (Original) The drive head assembly of claim 12 wherein removal of said cap member from said sleeve enables said stuffing box to be serviced without removing said drive head assembly from the well.
 14. (Original) The drive head assembly of claim 13 wherein tightening said cap member on said sleeve compressively loads said stuffing box for fluid sealing purposes.
 15. (Original) The stuffing box of claim 13 including means to bias said seal means towards said seal carrier and, in turn, said seal carrier towards said cap member.
 16. (Original) The drive head assembly of claim 15 wherein said means to bias press said seal means against said

seal carrier and, in turn, said seal carrier against said cap member when the fluid pressure in said first passageway exceeds wellhead pressure in said second passageway.

17. (Original) The drive head assembly of claim 13 including a ring member disposed beneath said seal means to support said seal means in said first passageway.

18. (Original) The drive head assembly of claim 17 including means to bias said seal means against said ring member and to bias said seal carrier against said cap member.

19. (Original) The drive head assembly of claim 15 wherein said means to bias is a spring.

20. (Currently amended) The drive head assembly of claim ~~19~~ 18 wherein said ~~resilient member~~ means to bias is a spring.

21. (Original) The drive head assembly of claim 15 further including a first upper and a second lower spaced apart bearing hubs, each having a bore formed axially therethrough for rotatably supporting said sleeve therein.

22. (Original) The drive head assembly of claim 21 wherein a lower end of said standpipe is received into said bore in said lower bearing hub for a fluid tight

connection between said standpipe's outer surface and said bore, the interior of said standpipe remaining exposed to wellhead pressure.

23. Original) The drive head assembly of claim 22 further including a labyrinth seal for fluid sealing between said first fluid passageway and said lower bearing hub.

24. (Original) The drive head assembly of claim 23 wherein said labyrinth seal is sealingly biased against an inner surface of said first fluid passageway and a contiguous surface of said lower bearing hub.

25. (Original) The drive head assembly of claim 24 wherein said labyrinth seal includes a plurality of apertures formed axially therethrough for respective fastening members adjustably connecting said labyrinth seal to said contiguous surface of said lower bearing hub.

26. (Original) The drive head assembly of claim 25 wherein the diameter of said apertures exceeds the diameter of said fasteners permitting said labyrinth seal to move in the horizontal plane relative to said contiguous surface of the lower hub for self alignment of said labyrinth seal to said inner surface of said first fluid passageway.

27. (Currently amended) The ~~bearing~~ drive head assembly of claim 26 including an O-ring seal between said labyrinth seal and said contiguous surface of said lower bearing hub for additional sealing therebetween.

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28. (Currently amended) The drive head assembly of claim 27
30 wherein said inner surface of said first fluid
passageway is defined by one or more of the inner
surface of said sleeve, said driven gear, a bearing
member rotatably supporting said sleeve or an extension
member connected to said sleeve.
29. (Currently amended) The drive head assembly of ~~any of~~
claim \pm 21 wherein said prime mover is drivingly
connected to said sleeve by gears.
30. (Original) The drive head assembly of claim 29 wherein
said gears comprise a drive gear mounted for rotation
on a drive shaft extending from said prime mover, and a
driven gear fixedly connected to said sleeve for
transferring rotational torque from said drive gear to
said sleeve.
31. (Original) The drive head assembly of claim 30
including a housing adapted to support said prime mover
and said first and second bearing hubs thereon, and to
enclose said drive shaft and said drive and driven
gears therein.
32. (Original) The drive head assembly of claim 4 including
adjustable valve means for controlling the pressure of
fluid in said first fluid passageway.
33. (Original) The drive head assembly of claim 32 wherein
the pressure of fluid in said first fluid passageway is

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maintained in the range of 50 to 500 psi in excess of wellhead pressure in said second fluid passageway.

34. (Original) In a stuffing box for sealing the end of a rotatable rod extending from a well bore, the improvement comprising:

a first fluid passageway disposed concentrically around at least a portion of the rod passing through the stuffing box;

a second fluid passageway disposed concentrically inside said first passageway, said second passageway being in fluid communication with wellhead pressure during normal operations;

said first and second passageways being in fluid communication with one another and having seal means disposed therebetween to permit the maintenance of a pressure differential between them; and means to pressurize fluid in said first passageway to a pressure in excess of wellhead pressure to prevent the leakage of well fluids through said stuffing box.

35. (Currently amended) The stuffing box of claim 28 34 including means to normally bias said seal means in opposition to wellhead pressure in said second passageway.

36. (Currently amended) The stuffing box of claim 29 34 wherein said seal means are disposed in said first passageway between said means to bias and a seal retaining member.

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37. (Currently amended) The stuffing box of claim ~~30~~ 36 wherein said means to bias comprise a spring to act with or without pressure in said first passageway to oppose wellhead pressure in said second passageway.
38. (Currently amended) The stuffing box of claim ~~31~~ 34 further comprising an outer axially disposed tubular sleeve disposed around a tubular standpipe concentrically mounted within said sleeve in annular spaced relation to said sleeve and the rod, the annular space between said sleeve and said standpipe defining said first passageway and the annular space between said standpipe and the rod defining said second fluid passageway.
39. (Currently amended) The stuffing box of claim ~~32~~ 38 wherein said sleeve is supported for rotation and is drivingly connected to said rod for rotation thereof.
40. (Currently amended) The stuffing box of claim ~~33~~ 39 wherein said sleeve has an upper and a lower end, said upper end being adapted for a releasable and tightenable connection to a cap member that closes said upper end around the rod.
41. (Currently amended) A drive head for use with a progressing cavity pump in an oil well, comprising:
a drive head housing;
a drive shaft rotatably mounted in said housing for connection to a drive motor;

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an annular tubular sleeve rotatably mounted in said housing and drivingly connected to said drive shaft;
a tubular standpipe concentrically mounted within said sleeve in annularly spaced relation thereto defining a first tubular fluid passageway for receiving fluid at a first pressure and operable to receive a polished rod therein in annularly spaced relation defining a second tubular fluid passageway exposed to oil well pressure during normal operation;
seal means disposed in said first fluid passageway;
means for maintaining the fluid pressure within said first fluid passageway greater than the fluid pressure in said second fluid passageway; and
means for releasably drivingly connecting said sleeve to a said polished rod ~~mounted~~ received in said standpipe.

42. (Currently amended) A The drive head as defined in claim 41, further including a centrifugal backspin retarder coupled to said drive shaft for reducing reverse rotation of said sleeve.
43. (Currently amended) In a drive head for rotating a rod in a well having a housing for fluid sealingly receiving the rod therethrough, said housing having a lower end and an upper openable end, the drive head having an upper end and a lower end, the improvement comprising a stuffing box for said rod integrated into ~~the~~ said upper end of said ~~drive head~~ housing to enable said stuffing box to be serviced by opening said

openable upper end of said housing, without removing said drive head from the well.

44. (Currently amended) In a drive head as defined in claim 43 wherein said stuffing box seals said rod against the pressure of fluid in the well, further including a fluid pump for pressurizing said stuffing box.

45. (Currently amended) In a drive head as defined in claim 44, ~~further including means for~~ wherein said fluid pump maintaining the maintains an uphole side of said stuffing box at a higher pressure than ~~the~~ a downhole side thereof to ~~prevent~~ limit leakage of fluid from said well bore.

Claims 46-65 (Withdrawn)

- Sub B7 66. (New) The stuffing box of claim 34 wherein said means to pressurize fluid in said first passageway comprise a fluid pump and a fluid conduit for the delivery of pressurized fluid from said pump to said first passageway.

67. (New) The stuffing box of claim 46 wherein said pump is actuatable by a prime mover, said prime mover also being drivingly connected to said sleeve for rotation thereof, said sleeve in turn being drivingly connected to said rotatably rod so that rotation of said sleeve by said prime mover causes rotation of said rod.